

Technical Data Sheet

Schulamid 612 IC 4005 W

Polyamide 612
LyondellBasell Industries
Engineering Plastics

Product Description

Unfilled and plasticized polyamide 612 compound.

General

Processing Method	• Extrusion
Resin ID (ISO 1043)	• PA612

Physical	Dry	Conditioned	Unit	Test Method
Density	1.04	--	g/cm ³	ISO 1183
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	69600 (480)	39900 (275)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress				ISO 527-2/1A/50
Yield	3050 (21.0)	3190 (22.0)	psi (MPa)	
Break	5950 (41.0)	4790 (33.0)	psi (MPa)	
Tensile Strain (Yield)	12	46	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	240	240	%	ISO 527-2/1A/50
Flexural Modulus ¹	70300 (485)	--	psi (MPa)	ISO 178
Flexural Stress ¹				ISO 178
10% Strain	2610 (18.0)	--	psi (MPa)	
3.5% Strain	1890 (13.0)	--	psi (MPa)	
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F (-40°C)	12 (25)	--	ft·lb/in ² (kJ/m ²)	
-22°F (-30°C)	14 (30)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	57 ft·lb/in ² (120 kJ/m ²)	No Break	(kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F (-40°C)	No Break	--		
-22°F (-30°C)	No Break	--		
73°F (23°C)	No Break	No Break		

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	203 (95.0)	--	°F (°C)	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	104 (40.0)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	248 (120)	--	°F (°C)	ISO 306/B50
--	372 (189)	--	°F (°C)	ISO 306/A50
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate				
0.0787 In (2.00 Mm)	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302

Additional Information

ISO 1874-PA 612-P-EAGHLW-14-005-X
DIN73378-PA 612-HIPHL

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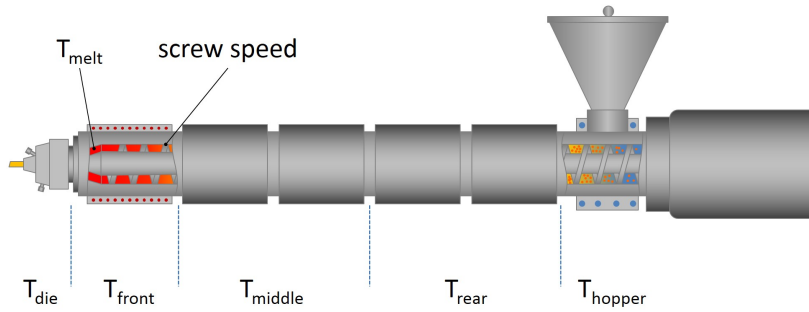


Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	446 to 518 °F	230 to 270 °C
Mold Temperature	122 to 194 °F	50 to 90 °C

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Extrusion	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	< 0.10 %	< 0.10 %
Melt Temperature	446 to 518 °F	230 to 270 °C

Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

These are typical property values not to be construed as specification limits.